AMENDMENTS TO THE CLAIMS

1.   (currently amended) A method of compressing data in a graphics processing system comprising:

5   defining a plurality of tiles of data;

defining a tile format table, ~~separate from data storage of said tiles,~~ containing a status entry for each of said plurality of tiles;

compressing each of said tiles, wherein each tile is compressed if it is determined that compression results in a smaller tile size;

10   setting said status entry for each of said tiles in said tile format table, wherein said status entry indicates the memory size of each of said tiles after compression, with a full size indicating a non-compressed tile;

storing said tiles in a memory; and

retrieving said tiles from said memory whereby said status entry indicating memory size

15   is used to determine whether said tiles need to be decompressed at time of retrieval.

2.   (original) The method of claim 1 wherein said compression is lossless.

3.   (original) The method of claim 1 wherein each of said tiles comprises a cache

20   line.

4.   (previously amended) The method of claim 1 wherein tiles read from said memory are decompressed when said status entry indicates that said tile is a compressed tile.

5.   (currently amended) A method of compressing color pixels in a graphics

processor system comprising:

defining a plurality of tiles of data;

defining a tile format table, ~~separate from data storage of said tiles,~~ containing a status

5   entry for each of said plurality of tiles;

compressing each of said tiles, wherein each tile is compressed if it is determined that

compression results in a smaller tile size;

setting said status entry for each of said tiles in said tile format table, wherein said status

entry indicates the memory size of each of said tiles after compression, with a full size indicating

10   a non-compressed tile;

storing said tiles in a memory; and

retrieving said tiles from said memory whereby said status entry indicating memory size

is used to determine whether said tiles need to be decompressed at time of retrieval.

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6.   (previously amended) The method of claim 5 wherein each of said tiles is

compressed using one of a plurality of compression methods.

7.   (previously amended) The method of claim 6 wherein each of said includes a

20   value identifying the compression method of said plurality of compression methods used to

compress said compressed tile.

8.   (previously amended) The method of claim 6 wherein each of said tiles is

comprised of pixels having pixel color components.

9.   (previously amended) The method of claim 8 wherein one of said compression

methods comprises entropy encoded differences between adjacent pixel color components, in

which unique color or component values in a tile are extracted and sorted by minimal difference,

5   are entropy encoded, and are indexed per pixel in said tile.

10.   (original) The method of claim 9 in which the assignment of entropy codes per

tile is based on the frequency of occurrence of difference values within said tile.

10   11.   (original) The method of claim 10 in which multiple component difference codes

are combined into a single code per pixel.

12.   (canceled)

15   13.   (previously amended) The method of claim 9 in which said unique colors and

components are sorted in a manner that minimizes a size of pixel difference encoding and

minimizes a size of color and component difference encoding.

14.   (previously added)   The method of claim 1 wherein said status entry further

20   indicates the validity of data in said tile.

15.   (previously added)   The method of claim 5 wherein said status entry further

indicates the validity of data in said tile.